UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,080	01/31/2002	Simon Pelly	1509-272	5292

22879 7590 02/28/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER	
TRUONG, LECHI	
ART UNIT	**PAPER NUMBER**
2194	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/060,080	PELLY ET AL.	
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-16 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims **1, 2, 4, 5, 7-9, 12, 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (US. Patent 6,493,772 B1) in view of Suzuki et al (US. Patent 6,728,809 B1).

As to claim 1, Hughes teaches the invention substantially as claimed including: a peripheral device (device controller 40 to one or more disk storage device, col 1, ln 20-24), a SCSI protocol (SCSI refers to the command and communication protocol, col 1, ln 33-35), a SCSI write/read signal, col SCSI read/write commands (col 8, ln 53-55), a SCSI inquiry signal (command for example inquiry, col 8, ln 61-65), receiving a SCI command write/read signal, receiving a SCSI inquiry signal (col 8, ln 60-65), initiating a response to the SCSI inquiry signal by the peripheral device for predetermined time period in response to receipt of the received SCSI command write/read signal and the received SCSI inquiry signal(col 8, ln 61-67/ col 7, ln 5-10/col 9, ln 32-38).

Hughes does not explicitly teach delaying. However, Suzuki teaches delaying an response command for predetermined time periods in response to the command signal (The

delay measuring means 110 measures the delay time from the registration of the node ID of the destination and the time required for the response packet to be received from the request packet after the request packet is sent, col 5, ln 1-5/ measure the delay time required for the response packet to be received after the request packet is sent, col 8, ln 3-9/ col 2, ln 55-60)/ the delay measuring means 110 measures the delay time needed for the response packet to return from the controlled unit after the request packet is sent out from the control unit(col 10, ln 40-45), the measured delay time is the predetermined time.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Hughes and Suzuki because Suzuki's delaying would improve the efficiency of Hughes 's system by allowing the time out control to control the time out when a packet is transferred between terminal units.

As to claim 2, Hughes teaches setting a delay timer and entering a delay mode for delaying said peripheral device initiating a response to said SCSI inquiry signal (col 9, ln 2-6), said delay mode set to extend for said pre-determined time period (col 4, ln 19-25/ col 5, ln 48-53/ col 7, ln 5-11).

As to claim 4, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Hughes teaches a tape drive (disk drive, col 1, ln 20-23), read and write to tape device is well-known in the art, removable tape data storage media for storage of data (col 5, ln 39-41), at least one buffer memory adapted to temporarily store data to be read and written from or to tape data storage media (col 2, ln 15-18/ and col 1, ln 24-27).

As to claim 5, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

As to claim 7, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Hughes teaches driver (the device controller, col 1, ln 15-22/ Fig. 1/ col 4, ln 6-11/ and ln 18-21), a delay timer to measure a predetermined time period (col 9, ln 2-6).

As to claim 8, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

As to claim 9, Hughes teaches driver is adapted to delay sending a response to said SCCI inquiry signal when in said delay mode (col 9, ln 2-6/ ln 33-39/ col 10, ln 60-65).

As to claims 12, 13, they are apparatus claims of claims 1 and 7; therefore, they are rejected for the same reasons as claims 1 and 7 above.

3. Claims **3, 6, 10, 11, 14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (US. Patent 6,493,772 B1) in view of Suzuki et al (US 6,728,809 B1), as applied to claim 1 above, in view of Latif et al (US. Patent 5,613,076).

As to claim 3, Hughes teaches performing a data transfer procedure after passage of the predetermined time period (col 11, ln 50-55).

Hughes and Suzuki do not teach performing an arbitrary host selection. However, Latif teaches performing an arbitrary host selection (during repeated arbitration phases... allows all target device to reselected the host device, col 4, ln 61-66).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Hughes, Suzuki and Latif because Latif's performing an

arbitrary host selection would improve the flexibility of Hughes and Suzuki's systems by allowing a uniform distribution of I/O tasks of all devices equally access to the SCSI bus without decreasing the utilization of the bus.

As to claims 6, 10, they are apparatus claims of claim 3; therefore, they are rejected for the same reason as claim 3 above.

As to claim 11, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Latif teaches initiate arbitration by target computer entity (col 3, ln 25-27), select the host computer (col 4, ln 61-66), bus free period (col 3, ln 24-26/ Fig. 2), bus free period comprising the inquiry period of and inquiry initiated by said host computer(When the SCSI bus 104 enter bus free phase, the host device 102 will initiate arbitration phase, col 3, ln 25-27/ Fig. 2)/ the Arbitration phase is inquiry period since Arbitration phase 204 allows one SCSI device to gain control of SCSI bus 104(col 2, ln 42-45), when a peripheral device is ready to exchange data, it will have to wait until is wins arbitration during arbitration phase(col 3, ln 35-37) and the standard SCSI arbitration mechanism also causes an uneven distribution of I/Os serviced by the peripheral devices connected ton a SCSI bus(col 4, 1-4).

As to claims 14-16, Latif teaches a tape data storage device (col 1, ln 18-21).

Response to the argument:

4. Applicant amendment filed on 11/21/2006 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) " Hughes does not teach , therefore, initiate a response to a SCSI inquiry signal by the peripheral device for a predetermined time in response to receipt of a SCSI command".

(2) " Suzuki does not delay an instruction by a predetermined period".

(3) " Hughes does not teach tape drive mechanism".

(4) " Latif does not dislose the use of bus free period in an inquired period. Instead, Latif uses bus free period that exist arbitration of the SCSI bus.

5. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Suzuki teaches the delay measuring means 110 measures the delay time from the registration of the node ID of the destination and the time required for the response packet to be received from the request packet after the request packet is sent, col 5, ln 1-5/ measure the delay time required for the response packet to be received after the request packet is sent, col 8, ln 3-9/ col 2, ln 55-60)/ the delay measuring means 110 measures the delay time needed for the response packet to return from the controlled unit after the request packet is sent out from the control unit(col 10, ln 40-45), the measured delay time is the predetermined time.

As to the point(3), Hughes teaches disk drive(col 1, ln 20-23), the tape drive is well-known in the art and the cited reference of Latif(5,613,076) also teaches a tape data storage device (col 1, ln 18-21).

As to the point (3), Suzuki teaches the measured delay time (col 5, ln 1-5/ col 8, ln 3-9/ln 55-60/ col 10, ln 40-45). The measured delay time is the predetermined time.

As to the point (4), Latif teaches when the SCSI bus 104 enter bus free phase, the host device 102 will initiate arbitration phase, col 3, ln 25-27/(Fig. 2)/ the Arbitration phase is inquiry period when the bus free. Arbitration phase 204 allows one SCSI device to gain control of SCSI

bus 104(col 2, ln 42-45), when a peripheral device is ready to exchange data, it will have to wait until is wins arbitration during arbitration phase(col 3, ln 35-37) and the standard SCSI arbitration mechanism also causes an uneven distribution of I/Os serviced by the peripheral devices connected ton a SCSI bus(col 4, 1-4).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

February 16, 2006

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER